MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
UNITED STATES DEPARTMENT OF AGRICULTURE

Number 125 September, 1924

SOUTHERN FIELD CROP INSECT INVESTIGATIONS

J. L. Webb, Entomologist, Acting in Charge

T. C. Barber, of the Brownsville, Tex., station, has been transferred from sugarcane insect investigations to work on the cotton hopper, which will be conducted at the Brownsville station.

The Sugarcane Insect Laboratory at New Orleans, La., was moved September 29 to rooms 6 and 7, Wilson Building, 8200 Oak Street, New Orleans. The new location is one block above Carrolton Avenue and can be reached by St. Charles and Tulane Belt cars.

L. P. O'Dowd and Daniel D. Ewing, jr., have been employed as Temporary Assistants for the months of October, November, and December. They will assist T. E. Holloway and W. E. Haley in making observations on sugar plantations during the "grinding season." J. W. Ingram, stationed at Crowley, La., will also assist in work on the sugar plantations this fall.

W. E. Haley recently spent some days in Mississippi, inspecting sugarcane for the pink sugarcane borer. He was assisted by M. M. High, of Truck Crop Insect Investigations, and E. K. Bynum, of the Mississippi Plant Board.

T. E. Holloway was recently at Cairo, Ga., determining the results of experiments on control of the sugarcane mealybug. J. W. Ingram will soon go to Georgia to start more experiments.

T. E. Holloway and W. E. Haley have arranged a number of cooperative experiments on control of the sugarcane moth borer in Louisiana sugar plantations.

F. S. Chamberlin, of the Quincy, Fla., tobacco insect substation, was in Washington during the latter part of the month for the purpose of using the library and consulting the systematic workers in the National Museum.

Dr. G. F. White spent two weeks in Houston and Port Lavaca, Tex., assisting Dr. W. D. Hunter in investigations of the cotton hopper, *Psallus seriatus*, as a possible plant disease carrier.

FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, Senior Entomologist, in Charge

Fred E. Brooks, in charge of the station at French Creek, W. Va., read a paper on nut insects at a meeting of the Northern Nut Growers' Association held in New York City, September 3 to 5.

The temporary appointment of B. S. Brown, jr., who has been assisting with life-history studies of peach insects at the Fort Valley, Ga., laboratory, terminated September 16. Mr. Brown is now with Dr. Hunter's pink bollworm force in Texas.

At the forty-ninth annual meeting of the Georgia State Horticultural Society, held in Griffin, Ga., August 6, Oliver I. Snapp gave an address on the year's development in peach insect control.

Judging from present indications, a half million pounds of paradichlorobenzene for peach borer control will be needed again this fall to supply the demand in the Georgia peach belt.

In company with N. S. Martin, Inspector in charge of the New Orleans office of the Louisiana State Entomologist, H. K. Plank visited the camphor scale infestations at Hammond, La., and also inspected a number of citrus plantings around Covington, La. A large acreage, approximately 800 acres, has recently been planted to the Satsuma orange, chiefly in the parishes of Tahgipohoa, St. Tammany, and Washington, and although about 25 per cent of the trees were lost during the freeze of last January, those remaining are in very good condition despite the prolonged drought and heat of the summer just past.

On September 8 F. C. Bishopp was a caller at the Camphor Scale Laboratory at New Orleans, and, besides informing himself as to its work, took notes on some wire-screen experiments being conducted there.

On September 16 Dr. F. A. Fenton, of the Boll Weevil Laboratory at Florence, S. C., was another visitor at the Camphor Scale Laboratory. Dr. Fenton spent some time looking over the camphor scale situation and the life history and control experiments under way.

E. J. Newcomer, of the Yakima, Wash., laboratory, spent the week of August 24 to 31 investigating the occurrence of red spiders in the orchard districts of North-central Washington and the Okanagan Valley of British Columbia, and also attended the annual meeting of the Northwestern Association of Horticulturists, Entomologists, and Plant Pathologists, at Penticton, B. C., August 26 to 29.

M. A. Yothers, of the Yakima, Wash., laboratory, devoted the time from August 31 to September 3 to his investigation of the narcissus bulb flies in the Puget Sound region.

Basil E. Montgomery has resigned as Field Assistant at the Vincennes, Ind., laboratory, to take up graduate work in entomology at Purdue University.

FOREST INSECT INVESTIGATIONS

F. C. Craighead, Entomologist in Charge

Dr. Craighead returned September 10 from an extended field trip, the purpose of which was the inspection of the major forest insect control projects under way in the West.

J. M. Miller accompanied Dr. Craighead on the inspection of the control work on the Kaibab Forest. He has now returned to headquarters at Northfork, Calif., and expects to spend the remainder of the field season on the Chiquito project.

F. P. Keen has returned to the Kaibab National Forest to conduct a survey necessary for obtaining results of the past summer's control work. It is likely that further control work will be carried out this fall, involving new procedure which promises to lessen the costs of the operations.

J. C. Evenden reports that a later examination of the spraying work against the lodgepole sawfly and needle tyer in the Yellowstone National Park shows the work to have been entirely successful. A high percentage of mortality was obtained against both insects. However, only the roadside trees were sprayed and there are many square miles of infested territory on each side of the road which will necessitate continued spraying for several years. A continuation of this work on a much larger scale is contemplated for next year.

Dr. S. A. Graham is still at his field headquarters in Itasca Park, Minn., studying the jack pine sawfly. He expects to return to St. Paul before the end of the month.

Dr. T. E. Snyder reports that preliminary results of the cooperative tests with the United States Bureau of Standards in spraying with metals to prevent attack by the California lead-cable borer (Scobicia declivis Lec.) conducted at Washington, D. C., this summer, were not very encouraging. Various metals were sprayed on sections of California live oak wood infested with these beetles, but even some of the harder metals were penetrated by the beetles in emerging from the wood. The tests were more severe than under conditions such that the beetles would attack cable, since insects make greater effort to emerge than to penetrate. The following metals were tested:

Metals Penetrated	Metals not Penetrated
1. Aluminum	1. Brass
2. Lead	2. Copper
3. Monell	
4. Nickel	
5. Tin	
6. Zinc	

William Middleton, of this office, recently returned from New York where he met the Fabre Liner Providence, on which was a shipment of parasitized elm leaf-beetles from Dr. W. R. Thompson, in France. An attempt is to be made to establish the dipterous parasite, Erynnia nitida R. D., of the elm leaf-beetle in this country.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, Entomologist, in Charge

B. L. Boyden, Associate Entomologist, in charge of the Tampa, Fla., laboratory, investigated an outbreak of the fall armyworm on a golf course at St. Petersburg, Fla. Specimens have been identified as Laphygma frugiperda S. & A.

R. E. Campbell, Associate Entomologist, in charge of the Alhambra, Calif., laboratory, visited points in Oregon and Washington to investigate the wireworm situation. He conferred with State officials at Corvallis, Oreg., and with Bureau officials at Toppenish, Wash.

J. R. Douglass, Assistant Entomologist, in charge of the Estancia, N. M., laboratory, visited Douglas, Ariz., to make a survey of a cucurbit pest in that vicinity and to determine whether the pest in question is Epilachna borealis or E. corrupta. The species has been tentatively determined as a western form of E. borealis.

Dr. F. A. Fenton, of the Bureau's boll weevil laboratory at Florence, S. C., visited the Baton Rouge, La., laboratory during the middle of September and conferred with Bureau and State officials.

J. E. Dudley, Associate Entomologist, in charge of the Madison, Wis., laboratory, visited points in Kansas and Missouri to confer with officials regarding the pea aphis situation and the development of the aphidozer.

M. E. Moore, R. H. Garrahan, and M. L. Reutenik, representatives of the Vegetable Growers Association of America, recently visited the Bureau and discussed insects affecting greenhouse vegetables and their control.

S. C. Brummitt, who for many years was located at Silver Hill, Ala., in charge of the sweet potato weevil eradication work in that district, has been transferred to Grand Bay, Ala., to be in closer touch with cooperative growers.

David Dunavan, temporarily in charge of the Toppenish, Wash., truck crop laboratory, attended the meeting of horticulturists, pathologists, and entomologists, held at Penticton, B. C.

N. F. Howard, Associate Entomologist, in charge of the Birmingham, Ala., laboratory, visited Knoxville and other points in Tennessee to discuss the bean beetle situation with State and University officials.

C. H. Popenoe has been transferred from Silver Spring, Md., to Washington, D. C., for the purpose of compiling and publishing complete data on various insecticides, together with their sources, properties, uses, etc.

The temporary appointments of C. J. Boal and H. A. Richman, field assistants at the Riverton, N. J., laboratory, have been terminated.

H. L. Weatherby, who has been engaged in scouting the Mexican bean beetle in the southeastern seaboard region, has resigned and returned to Montgomery, Ala., to resume his work at the Lanier High School.

David Dunavan, temporarily in charge of the Toppenish, Wash., truck crop laboratory, has returned to the Oregon Agricultural College for the completion of his last semester and to receive his degree.

BEE CULTURE INVESTIGATIONS

J. I. Hambleton, Apiculturist, in Charge

Dr. E. F. Phillips, after being with the Office of Bee Culture Investigations for nineteen years, assumed his new duties as Professor of Apiculture at Cornell University October 1.

About 250 people from the United States, Canada, and Europe attended the Seventh International Apicultural Congress held at Quebec September 2 to 4. This office was represented by E. F. Phillips and James I. Hambleton.

L. M. Bertholf, who has been engaged in a study of the development of the honeybee larva, has resigned his temporary appointment to accept a position as Instructor in Biology at the Western Maryland University, Westminster, Md. He will also continue graduate work at Johns Hopkins University.

W. J. Nolan attended the meeting of the North Carolina State Beekeepers' Association at Winston-Salem, September 10. E. S. Prevost and C. L. Sams, formerly extension workers with this office, but each now engaged in similar work for South Carolina and North Carolina respectively, were also present.

Carlton Burnside, who has been engaged in a study of the intestinal flora in the honeybee, has resigned his temporary appointment to resume graduate study at the University of Michigan.

CEREAL AND FORAGE INSECT INVESTIGATIONS

G. A. Dean, Senior Entomologist, in Charge

The entomological laboratory at Ritzville, Wash., in charge of M. C. Lane, has been moved to Toppenish, Wash., a location believed to be more advantageous for the cooperative studies on the wireworms injurious to potatoes, wheat, and other crops.

C. N. Ainslie, Entomologist, in charge of the Sioux City laboratory, who has been making a study of the new infestation of the Hessian fly in the northwestern part of North Dakota, is planning a trip to northeastern Montana, where he will confer with Dr. J. R. Parker, of the Montana Experiment Station, concerning the new infestation of the Hessian fly in that State.

Prof. Geo. A. Dean returned to Washington September 16 from an extensive trip to several of the entomological laboratories of this Division, located in the Northwestern, Central, and Southern States. While in the Northwest he attended the conference of the Northwest International Committee on Farm Pests, held at Montana Agricultural College, Bozeman, August 27 and 28. Professor Dean reports a decided improvement in the grasshopper situation in the Northwestern States. The loss by grasshoppers during the past season has been very much less than that of the years 1922 and 1923. He also reports splendid results by the entomologists of the Billings, Mont., laboratory in the control of the Mormon cricket with the poisoned bran mash and by the entomologists of the Salt Lake City laboratory in the control of the alfalfa weevil with arsenical dust.

Stewart Lockwood and F. W. Boyd, of the Billings, Mont., laboratory, attended the conference of the Northwest International Committee on Farm Pests, held at Bozeman August 27 and 28.

Samuel Blum, Junior Entomologist, of the Columbia, S. C., laboratory, resigned October 3. J. C. Shiver, a graduate of the South Carolina Agricultural College, who has been engaged in entomological work with the Gipsy Moth Laboratories at Melrose Highlands, Mass., has been appointed to fill the vacancy. Mr. Shiver reported for his new duty September 29.

L. H. Worthley, in charge of the European Corn Borer Control, and D. J. Caffrey, in charge of the Arlington, Mass., laboratory, spent several weeks in August and September inspecting the European corn borer situation in New York, Pennsylvania, Ohio, and Michigan. They report that the corn borer is not only much more widely distributed in northern Ohio and south-

eastern Michigan but also that the degree of infestation has increased in several districts. The reports for northwestern Pennsylvania, western New York, and Massachusetts are much more favorable. The report of the results of clean-up work on Long Island, in the vicinity of Brooklyn, is very encouraging.

Resolutions expressing appreciation for the valuable services rendered by George I. Reeves, Entomologist, in charge of the Salt Lake City laboratory, have been received from representatives of California and Nevada who just recently held a conference at Reno, Nev., relative to the alfalfa weevil investigations.

W. R. Walton left Washington September 28 for Arlington, Mass., where he will inspect the European corn borer work conducted by the Arlington laboratory.

MISCELLANEOUS INVESTIGATIONS

(Items from the National Museum Contributed by S. A. Rohwer)

Fred M. Schott, of Brooklyn, N. Y., recently in the service of the State of New Jersey, was for a week, while in Washington, a frequent visitor to the Division of Insects, and brought with him a number of insects for identification by the specialists.

Messrs. Nicolai, Shoemaker, and Quersfeldt, of New York, recently spent a week doing miscellaneous collecting in the vicinity of Washington and visited the Section of Insects to meet the members of its force and consult with the coleopterists.

Captain Bartlett, who commanded the vessel "Roosevelt" on Peary's expedition to the North Pole, called on Dr. Aldrich October 1 to clear up some questions concerning specimens collected on the expedition. The specimens had been previously sent to the Museum in pill boxes, with only the date and locality of collection. It is believed that as a result of this conference with Captain Bartlett more information will be available, the specimens will be of more value, and a more accurate record will be preserved of the entomological results of the expedition.

Prof. W. M. Wheeler, of Harvard University, has sent to the Museum paratypes of an extraordinary larval myrmecophile which he collected in Panama and recently described as Nothomicrodon aztecarum, new species. They are very small insects with no legs and few organs, shaped like a little bag or flask with the head sticking out at one end. It is supposed that they belong to the Diptera, but it is impossible to tell with any certainty to what family, as no one has previously found anything like them.

George N. Wolcott, of Hayti, recently called at the Division of Insects, bringing with him specimens to have identified, and consulted the specialists regarding some of his taxonomic work.

William Schaus went to Pittsburgh toward the end of September to consult with Dr. Holland, examine types in the Carnegie Museum, and return material which had been sent him for study. Mr. Schaus has recently completed a paper on certain African Lepidoptera.

LIBRARY

Mabel Colcord, Librarian

New Books

Benard, G.

Insectes coleopteres: fam. Carabidae, subf. Anthriinae. Paris, E. Blondel La Rougery 1923. 34 p., illus., pl., maps, 29 cm. At head of title: Voyage de M. Guy Babault dans l'Afrique orientale anglaise. Resultats scientifiques.

Bodenheimer, F. S.

The Coccidae of Palestine; first report on this family. Tel-Aviv, Palestine, July, 1924. 100 p. illus., 12 pl., 8°. (The Zionist Organisation Institute of Agriculture and Natural History Agricultural Experiment Station. Bul. 1.) Bibliography, p. 95-96.

Cooling, L. E.

The larval stages and biology of the commoner species of Australian mosquitoes with the biology of Aëdes pecuniosus Edwards. Melbourne, Albert J. Mullett, Government Printer, April, 1924. 40 p., illus., 8°. Commonwealth of Australia, Department of Health, Service publication (Tropical division) No. 8.

A synoptic list of the more important species of Culicidae of the Australian region... Melbourne, Albert J. Mullett, Government Printer, 1924. 61 p., 8°. Commonwealth of Australia. Department of Health. Service publication (Tropical division) No. 2.

Csiki, E.

Serropalpidae. Berlin, W. Junk, Feb. 29, 1924. 62 p., 4to. (Schenkling, S. Coleopterorum catalogus pars 77.)

Cuvier, George.

The animal kingdom. London, W. S. Orr, 1849. 718 p., illus., pl., 4°. Insects, p. 471-637.

Goldsmith, Oliver.

A history of the earth and animated nature... Glasgow, Blackie & Son, 1853. 2 v., 4°. V. 2, p. 436-556, A history of insects.

Houlbert, Constant Vincent.
Thysanoures, dermapteres et orthopteres de France et de la faune europeene... Paris, O. Doin, 1924. xii, 382 p., illus., 28 1/2 cm. (Encyclopedie scientifique. Biblictheque de zoologie.)

Knisch, A.
Hydrophilidae. Berlin, W. Junk, Apr. 30, 1924. 306 p., 4to. (Schenkling, S. Coleopterorum catalogus, Pars 79.)

Mehdi Hassan, Syed.
... Translation of M. Hautefeuille's Report on lac and its industrial treatment...Hyderabad-Deccan, Printed at the Government Central Press, 1924. 89 p.,fold., map. 8°. (Department of industries and commerce H, E. H. the Nizam's government Industrial laboratory, Bul. 2.) Tir 1333 F. May, 1924.

Mitra, K.
Prepotency of stimuli--a study in the behaviours of house flies. Univ. of Calcutta. Jour. Dept. Sci., v. 6, Zoology, p. 1-9. Calcutta, 1924.

Peirson, H. B.
Estimating forest insect damage and progress report on other forest insect studies. Augusta, 1924. 22 p., 8°. (Maine forest service, Bul. 3.)

Seidlitz, Georg Karl Maria von.
Fauna transsylvanica. Die Kaefer (Coleoptera) Siebenbürgens... Königsberg, Hartungscheverlags-druckerei, 1891-. 6 p. l., iv, 914 p., pl., 23 1/2 cm. "Abkurzungen der namen und angabe der wichtigsten literatur"., p. xxix-xxxviii.

Speyer, Edward R.
Researches upon the larch chermes (Cnaphalodes strobilobius Kalt.) and their bearing upon the evolution of the Chermesinae in general. Royal Soc. London. Philos. Trans. B. 212, p. 111-146, pl. 7-8, 1923.

Weise, J.
Chrysomelidae: 13. Galerucinae. Berlin, W. Junk, May 30, 1924. 252 p., 4to. (Schenkling, S. Coleopterorum catalogus pars 78.)